# IV. ENVIRONMENTAL IMPACT ANALYSIS
# L. UTILITIES
# 1. ELECTRICITY AND NATURAL GAS

The project site is located in an urbanized area with existing electricity and natural gas infrastructure. This section provides a discussion of the existing infrastructure, estimated project and program electricity and natural gas consumption, and the ability of existing and planned infrastructure to meet projected program and cumulative demand.

## 1. APPLICABLE PLANS AND POLICIES

### a. California Code of Regulations Title 24

Energy consumption in new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of both residential and non-residential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the City building permit process. Mandatory requirements include installation of certified insulating material, specifications for minimum piping insulation, use of certified appliances, and specifications for ventilation systems, water heating systems, and lighting controls.

### b. City of Huntington Beach General Plan

The City of Huntington Beach General Plan, Utilities Element and Environmental Resources/Conservation Element define goals, objectives, policies, and programs related to the provision of electricity and natural gas and the promotion of energy conservation.

The following goal of the Utilities Element is relevant to the project site and/or the proposed project:

**U 5**: Maintain and expand service provision to City of Huntington Beach residences and businesses.

The following specific policy of the Utilities Element is relevant to the project site and/or the proposed project:

**U 5.1.2**: Continue to underground above-ground electrical transmission lines.

The following goal of the Environmental Resources/Conservation Element is applicable to the proposed project:

**ERC 5**: Conserve the natural environment and resources of the community for the long-term benefit and enjoyment of its residents and visitors.

The following specific policy of the Environmental Resources/Conservation Element is relevant to the project site and/or the proposed project:

**ERC 5.2.4**: Require that the use of energy-saving designs and materials be incorporated into the construction of all public buildings, while encouraging their use Citywide.

### c. City of Huntington Beach Zoning and Subdivision Ordinance

Section 255.04 F. of the City of Huntington Beach Zoning and Subdivision Ordinance requires that each parcel shall be served by gas and electric facilities. Section 255.04 G.1. of the City's Zoning and Subdivision Ordinance requires that all existing and proposed utilities along frontage streets be placed underground.

## 2. ENVIRONMENTAL SETTING

### a. Electricity

The Southern California Edison Company (SCE) provides electrical service to the project site. Major SCE facilities located in the City include a generating station, six substations, and switching yards. As shown on Figure II.C-1, an SCE substation is located at the northwest corner of the intersection of Warner Avenue and B Street. No development is proposed within this SCE easement. Existing overhead transmission lines are located along the west side of B Street. There currently is no electrical consumption resulting from uses associated with Area A. Existing electrical consumption associated with Area B1 is 611,400 kilowatt-hours per year (kWh/yr), as presented in Table IV.L.1-1 on page 256. Additional electrical consumption is also associated with the Bus Maintenance Facility located on Area B2.

**Table IV.L.1-1**

**EXISTING ENERGY CONSUMPTION – AREA B1**

| Land Use | Size | Electrical Power[a] kWh/yr | Natural Gas[b] cf/mo |
|---|---|---|---|
| Residential | 9 units | 54,729 | 35,262 |
| Commercial/retail | 19,875 s.f. | 269,306 | 57,638 |
| Restaurant | 4,200 s.f. | 199,290 | 12,180 |
| Office | 6,500 s.f. | 88,075 | 18,850 |
| Total Existing | | 611,400 | 123,930 |

*s.f. = square feet*

[a] *Electrical consumption rate of 6,081 kW per unit for residential uses, 13.55 kW per square foot per year for commercial and office uses, and 47.45 kW per square foot per year for a restaurant and/or fast food establishments.*

[b] *Natural gas consumption rate of 3,918 kW per unit for residential uses and 2.9 cubic feet per square foot per month for commercial uses.*

*Source: SCAQMD CEQA Air Quality Handbook, 1993 and Huntington Beach General Plan EIR, July 5, 1995.*

### b. Natural Gas

Natural gas is currently supplied and distributed to the project site by the Gas Company. The Gas Company receives its supply of natural gas from several sources: Southern California, Northern California, and out of state suppliers. Currently no natural gas consumption is associated with uses on Area A. Existing natural gas consumption associated with Area B1 is 123,930 cubic feet per month (cf/mo), as presented in Table IV.L.1-1. Additional natural gas consumption is also associated with the Bus Maintenance Facility located on Area B2.

## 3. ENVIRONMENTAL IMPACTS

### a. Significance Threshold

A significant impact to electricity and natural gas service would occur if the proposed project is determined to:

- Be inconsistent with adopted plans and policies.
- Result in an increase in demand for services that could not be met by existing or planned resources.
- Result in a need for the substantial expansion of existing or the construction of new facilities or the purchase of equipment.

### b. Project Impacts

The proposed project would replace the vacant Rancho View School and associated uses on Area A with retail warehouse and restaurant uses, and associated surface parking and landscaping. Proposed development of Area A would include 159,300 square feet of commercial/retail and 9,000 square feet of restaurant uses for a total of 168,300 square feet at buildout.

#### (1) Electricity

Development of Area A would result in a demand for electrical service to the project site, where currently no demand exists. As shown on Table IV.L.1-2, the estimated electrical consumption of the proposed project would be approximately 2.5 kWh/yr. Since no amendment to the City's General Plan is proposed, this additional electrical consumption is within the overall planning parameters of SCE, which are based on the City's General Plan land use designations. To ensure energy efficiency, the proposed project would be designed in compliance with the requirements of Title 24.

Electrical service to the proposed project would be provided via the existing transmission and distribution system, pursuant to Section 255.04 F. of the Zoning and Subdivision Ordinance. No overhead transmission lines are located within Area A that would require undergrounding. Since the estimated electrical consumption is consistent with SCE planning projections and service can be provided by existing facilities, the proposed project would not adversely impact electrical services in the area or affect the ability of SCE to provide service to other customers.

#### (2) Natural Gas

Development of Area A would result in a demand for natural gas service to the project site where currently none exists. As presented in Table IV.L.1-2, the estimated natural gas consumption of the proposed project would be approximately 5.5 million cf/mo. Due to the developed condition of the site and surrounding area, natural gas service could be provided by existing facilities. Natural gas supply to meet existing and projected future demand can be accommodated by The Gas Company. Therefore, no significant impact would result on the availability or distribution of natural gas to the proposed project or the region.

To ensure energy efficiency, the proposed project would be designed in compliance with the requirements of the State Building Energy Efficiency Standards (Title 24).

**Table IV.L.1-2**

**ANNUAL ENERGY CONSUMPTION – AREA A**

| Land Use | Size | Electrical Power[a] kWh/yr | Natural Gas [b] cf/mo |
|---|---|---|---|
| Retail (Lowe's) | 159,300 s.f. | 2,158,515 | 5,543,640 |
| Restaurant | 9,000 s.f. | 427,050 | 26,100 |
| Project Level Total | | 2,585,565 | 5,569,740 |

*s.f. = square feet*

[a] *Electrical consumption rate of 13.55 kW per square foot per year for retail uses, and 47.45 kW per square foot per year for a restaurant and/or fast food establishments.*

[b] *Natural gas consumption rate of 2.9 cubic feet per square foot per month for commercial uses.*

*Source: SCAQMD CEQA Air Quality Handbook, 1993 and Huntington Beach General Plan EIR, July 5, 1995.*

### (3) Goals and Policies Related to Electricity and Natural Gas

Consistent with Goal U5 of the Utilities Element of the General Plan, the proposed project would include the extension of existing utilities to the project site. The cost of these improvements would be borne by the developer. As indicated above, there is adequate capacity for the provision of electrical and natural gas services for the proposed project. In conformance with Goal ERC 5 and Policy ERC 5.2.4 the proposed project would incorporate, where feasible, state-of-the-art energy conservation features that meet or exceed Title 24 requirements. Therefore, the proposed project is consistent with the requirements of the applicable goals of the Utilities and Environmental Resources/Conservation Elements.

## c. Program Level Impacts

Future development of Area B1 would allow for the intensification of the existing commercial/retail and restaurant uses from 30,575 square feet to approximately 74,400 square feet. The nine single-family residential units currently located in Area B1 would be removed. The existing Ocean View School District Bus Maintenance Facility, located in Area B2, would continue its current operations at this location.

### (1) Electricity

As shown on Table IV.L.1-3 on page 259 the estimated electrical consumption with the development of Area B1 would be approximately 1.1 million kWh/yr, an increase of 539,100 kWh/yr over the estimated existing usage. The total estimated electrical consumption with the development of Area A and B1 would equal 3,736,065 kWh/yr. This represents a net increase of 3,124,665 kwh/yr above current electrical use in the program area. Area B2 would not involve a

**Table IV.L.1-3**

**ANNUAL ENERGY CONSUMPTION – AREA B1**

| Land Use | Size | Electrical Power[a] kWh/yr | Natural Gas [b] cf/mo |
|---|---|---|---|
| **Existing** | | | |
| Residential | 9 units | 54,729 | 35,262 |
| Commercial/retail | 19,875 s.f. | 269,306 | 57,638 |
| Restaurant | 4,200 s.f. | 199,290 | 12,180 |
| Office | 6,500 s.f. | 88,075 | 18,850 |
| **Total Existing** | | **611,400** | **123,930** |
| | | | |
| **Buildout** | | | |
| Commercial/retail | 57,000 s.f. | 772,350 | 165,300 |
| Restaurant | 4,200 s.f. | 199,290 | 12,180 |
| Office | 13,200 s.f. | 178,860 | 38,280 |
| **Total Buildout** | | **1,150,500** | **215,760** |
| **Consumption Increase** | | **539,100** | **91,830** |

[a] *Electrical consumption rate of 6,081 kW per unit for residential uses, 13.55 kW per square foot per year for commercial and office uses, and 47.45 kW per square foot per year for a restaurant and/or fast food establishments.*

[b] *Natural gas consumption rate of 3,918 kW per unit for residential uses and 2.9 cubic feet per square foot per month for commercial uses.*

*Source: SCAQMD CEQA Air Quality Handbook, 1993 and Huntington Beach General Plan EIR, July 5, 1995.*

change in current electricity demand. To ensure energy efficiency, any future development would be designed in compliance with the requirements of Title 24.

In conformance with Section 255.04 of the Zoning and Subdivision Ordinance Code, electrical service to the program development would be provided to Areas B1 and A via the existing transmission and distribution system. Pursuant to Section 255.04 G.1. of the Zoning and Subdivision Ordinance Code all utility lines located on the west side of B Street would be placed underground. Since the estimated electrical consumption is consistent with SCE planning projections and service can be provided by existing facilities, program improvements would not adversely impact electrical services in the area or affect the ability of SCE to provide service to other customers.

### (2) Natural Gas

As shown on Table IV.L.1-3 the estimated natural gas consumption for Area B1 is approximately 215,760 cf/mo, an increase of 91,830 cf/mo over existing conditions. In combination with development proposed for Area A, total estimated natural gas consumption would be approximately 5,785,500 cf/mo. This represents a net increase of 5,661,570 cf/mo above existing natural gas consumption in the program area. Area B2 would not involve a

change in current natural gas demand. Due to the developed condition of the site and surrounding area, natural gas service could be provided by The Gas Company, as there is available natural gas supply to meet existing and projected future demand. Therefore, no significant impact would result on the availability or distribution of natural gas to the proposed project or the region. To ensure energy efficiency the project would be designed in compliance with the requirements of the Title 24.

### (3) Goals and Policies Related to Electricity and Natural Gas

Consistent with Goal U5 and Policy U 5.1.2, the proposed program would include the extension and upgrade of existing utilities to the project site. In addition, undergrounding of existing overhead transmission lines along the west side of B Street would be required for development of Area B1. The cost of these improvements would be borne by the respective developer(s). There is adequate capacity for the provision of electrical and natural gas services for the proposed project. In conformance with Goal ERC 5 and Policy ERC 5.2.4, program development would incorporate, where feasible, state-of-the-art energy conservation features that meet or exceed Title 24 requirements. Therefore, the proposed program would be consistent with the requirements of the applicable goals of the Utilities and Environmental Resources/Conservation Elements.

## 4. CUMULATIVE IMPACTS

Development associated with the related project described in Section III.B., Related Projects, in combination with the proposed program, would cumulatively contribute to an increased demand for electricity and natural gas. The SCE and the Gas Company base future energy demand on full build out of land use designations indicated in a city's general plan. Due to the urbanized condition of the site and surrounding area, the majority of electrical and gas facilities are already in place. Also SCE and the Gas Company evaluate each project on an individual basis to determine if their respective existing and future transmission and distribution facilities and available supply are sufficient to meet the projected energy demands of new developments. In addition, each related project would be required to comply with energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. As a result, implementation of the proposed program and related projects would not significantly affect the provision of electrical and natural gas service to the project site and vicinity. Therefore, the proposed project in conjunction with other past, present, and reasonably foreseeable future projects would not result in a cumulative impact to the provision of electrical and natural gas service.

## 5. STANDARD CITY POLICIES AND REQUIREMENTS

Compliance with existing State and City development requirements will serve to conserve energy use and minimize waste of non-renewable resources associated with the proposed project. The proposed project shall comply with the following:

**Prior to Issuance of Building Permits**

1. Building plans shall be submitted to, and approved by the Department of Building and Safety which demonstrate compliance with the requirements of Title 24 of the California Code of Regulations governing efficiency standards for heating, cooling, ventilation, water heating, and lighting.

## 6. LEVEL OF SIGNIFICANCE BEFORE MITIGATION

The proposed project would not adversely impact electrical services in the area or affect the ability of SCE to provide service to other customers. In addition, no significant impact related to the availability or distribution of natural gas to the proposed project or the region would occur.

## 7. MITIGATION MEASURES

Implementation of the proposed project would not result in a significant impact to electrical and natural gas resources and service and no mitigation measures are required.

## 8. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed project would not result in a significant impact to electrical and natural gas resources and service. The proposed project in conjunction with other past, present, and reasonably foreseeable future projects would not result in a cumulative impact related to electricity and natural gas and the provision of service.